

Change into Slope Intercept

Are you taking notes?

Remember Slope

$$m = \text{slope} = \frac{\textit{rise}}{\textit{run}} = \frac{y_2 - y_1}{x_2 - x_1}$$

Don't forget to put the y's on top and the x's on the bottom.

Steps for writing an equation in slope int. from two point.

- Find the slope.
- Write an equation in point slope form using the first of the two points.
- Distribute the slope through the parenthesis.
- Get y by itself.

Example #1

- Given the points $(-1,1)$ and $(3,5)$ write an equation in slope intercept form.
- Find the slope
- $m=1$
- Write the equation in point slope
- $Y-1=1(x+1)$
- Follow the steps to change into slope intercept.
- $y = x + 2$

Example #2

- Given the points (4,-5) and (8,-8)
- Find the slope
- $M = -3/4$
- Write the equation in point slope
- $y + 5 = -3/4(x - 4)$
- Follow the steps to change into slope intercept.
- $y = -3/4x - 2$

Example #3

- Given the points $(-1, -4)$ and $(2, 8)$
- Find the slope.
- $M = 4$
- Write the equation in point slope
- $Y + 4 = 4(x + 1)$
- Follow the steps to change into slope intercept.
- $y = 4x$